

t15_analort
(TMaTJT34pVcUCBHrscTfCKC435JcFRSRcYr)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_analort : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l2_algstr_0 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ &X1 (u1_struct_0 X0)) \Rightarrow (k4_algstr_0 X0 (k4_algstr_0 X0 X1) = X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ &X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ &((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ &X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\ &(\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 \\ &X3 (u1_struct_0 X0)) \Rightarrow ((r1_analmetr X0 X1 X2) \Rightarrow (k2_analort X0 X1 \\ &X2 (k2_analort X0 X1 X2 X3) = k4_algstr_0 X0 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (l1_rlvect_1 X0) \Rightarrow (l2_algstr_0 X0) \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v2_struct_0 \\
& X0)\wedge((v13_algstr_0 X0)\wedge((v2_rlvect_1 X0)\wedge((v3_rlvect_1 X0)\wedge \\
& ((v4_rlvect_1 X0)\wedge((v5_rlvect_1 X0)\wedge((v6_rlvect_1 X0)\wedge((v7_rlvect_1 \\
& X0)\wedge((v8_rlvect_1 X0)\wedge(l1_rlvect_1 X0))))))))))\wedge((m1_subset_1 \\
& X1 (u1_struct_0 X0))\wedge((m1_subset_1 X2 (u1_struct_0 X0))\wedge(m1_subset_1 \\
& X3 (u1_struct_0 X0))))\Rightarrow(m1_subset_1 (k2_analort X0 X1 X2 X3) (\\
& u1_struct_0 X0))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(((\neg v2_struct_0 X0)\wedge((v13_algstr_0 X0)\wedge((v2_rlvect_1 \\
& X0)\wedge((v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge((v5_rlvect_1 X0)\wedge \\
& ((v6_rlvect_1 X0)\wedge((v7_rlvect_1 X0)\wedge((v8_rlvect_1 X0)\wedge(l1_rlvect_1 \\
& X0))))))))))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(\forall X3.(m1_subset_1 \\
& X3 (u1_struct_0 X0))\Rightarrow(\neg(r1_analmetr X0 X1 X2)\wedge(\forall X4.(m1_subset_1 \\
& X4 (u1_struct_0 X0))\Rightarrow(k2_analort X0 X1 X2 X4\neq X3))))))
\end{aligned}$$